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Docket No.: 30014340-1 US (1509-263)

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of

Lawrence WILCOCK et al.

Confirmation No.: 3640

U.S. Patent Application No. 10/058,045

Group Art Unit: 2644

Filed: January 29, 2002

Examiner: Daniel R. SELLERS

For: AUDIO USER INTERFACE WITH AUDIO CURSOR

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571-273-8300

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Dear Sirs:

Appellant responds to the new issues and new arguments set forth in the ground of rejection against claim 1 and Response to Argument section of the Examiner's Answer.

The rejection against claim 1 (that is also applicable to claims 21 and 37; see pages 7 and 9 of the Examiner's Answer) in portions A and B of the Response to Argument alleges the motivation for modifying the primary reference, Slezak, as result of Cragun, is that "Cragun teaches methods that allow a visually impaired user to use a graphical user interface." However, this rationale is completely at odds with the portions of the Slezak disclosure (column 9, lines 26-48 that describe Figure 9 and column 7, line 62-column 8, line 17 that describe Figures 6A and 6B) relied on by the examiner. Because the arrangements in these portions of Slezak can only be used by persons

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having visual acuity, not the visually impaired, one of ordinary skill in the art would not have looked at Cragun to modify Slezak.

Figure 9 and column 9, lines 26-48, of Slezak relate to enabling a sighted user to more easily locate a visual cursor on a computer display screen. A sound is generated at a position in space that corresponds somewhat with the position of the visual cursor to enable the user of the screen to more quickly determine the location of the visual cursor. There is no reason a visually impaired person would have a need for the arrangement of Figure 9.

Figures 6A and 6B and column 7, line 62-column 8, line 17 of Slezak are concerned with information 190 comprising sub-elements 192 that can be hypertext markup language (HTML) pages. The HTML pages are rendered on monitor 160 while a user browses an information site available through an intranet or the Internet. Simulated sound sources 198 correspond in position with the position of a user relative to sub-elements 192. In response to a user navigating through sub-elements 192 the various sub-elements are visually displayed and simulated sound source 198 moves from the location of one of the sub-elements 192 illustrated in Figure 6B to the position of another of the elements. Simulated sound sources 198 thus represent movement of a user who must be sighted and cannot be the visually impaired. If the user were visually impaired, he would not be able to navigate through sub-elements 192. Because sound sources 198 represent the positions of users relative to sub-elements 192 (not the

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positions of the sub-elements) the sound sources are not item-representing sound sources, as alleged in the first line of page 4 of the Examiner's Answer.

Portion B of the Response to Argument alleges the examiner's proposed modification of Slezak as result of Cragun "would have been obvious to one of ordinary skill in the art, because Slezak's teachings relate to computer systems with graphical user interfaces and Cragun's teachings relate to allowing a visually impaired user to use a graphical user interface." Appellant cannot agree. The examiner's proposed modification ignores the fact that Slezak's disclosure is applicable only for use by sighted persons and is incapable of use by the visually impaired.

The examiner's proposed modification also ignores the fact that Slezak, in so far as (1) Figures 6A and 6B are concerned, only provides audible indications of the position of a user of information who is navigating through sub-elements 192 of information 190, and (2) Figure 9 only provides an audible indication of cursor location. Cragun provides no audible indication of user position or cursor location. Hence, Slezak fails to disclose a synthesized sound source that represents items, and neither of these references discloses an audio user-interfacing method or apparatus in which synthesized sound sources that represent items cooperate with distinctive sound sources that emanate from a movable cursor.

Based on the foregoing, one of ordinary skill in the art would have no reason to modify the subject matter of Figure 9 or the subject matter of Figures 6A and 6B of Slezak, both of which are adaptable for use only by the sighted, as result of the Cragun

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aid for the visually impaired. The basis for modifying Slezak as a result of Cragun that is set forth in the Examiner's Answer is a classical example of an examiner reading an applicant's claim, casting about to find bits and pieces of the various elements of the claims in different references, and then coming up with an illogical hindsight basis for combining the references to meet the various elements of the claim. Such an approach to the determination of what is obvious to one of ordinary skill in the art is completely contrary to the decisions relating to obviousness under 35 USC 103.

Portion E of the Response to Argument incorrectly states that sound sources 294 and the plurality of circles of Slezak, Figure 10 (never previously relied upon by the examiner), can be considered as the requirement of claim 21 for "rendering means, including audio output devices, for generating an audio field in which said item-representing and cursor sound sources are synthesized at their associated rendering positions." There is considerable confusion as to what element constitutes a sound source in Figure 10 of Slezak. Column 9, lines 51-53 indicates the simulated sound sources bear reference numeral 285 associated with an arrow within three-dimensional representation 284. Column 10, Lines 1-14 of Slezak indicates reference numeral 294 represents an indicator of a simulated sound source that is brought to the attention of a user by flashing or changing color. When the user has moved the indicator 294 to a new position, a computer generates an audible indication of the new position of a simulated sound source in the space around the user. Column 10, lines 1-3 indicates the simulated sound sources associated with Figure 10 are selected from a list of

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system events 282, such as "e-mail notification." represented by the reference numeral 285. Hence, it appears indicator 294 is some type of optical source that flashes or changes color as the selected simulated sound source moves. There is no basis from the Slezak specification for the examiner to state the circle associated with reference numeral 294 is a simulated sound source per se. Based on the foregoing, the allegations in Portion E of the Response to Argument concerning the "rendering means" requirement of claim 21 are baseless.

Portion F of the Response to Argument wrongly alleges that the requirement of claim 21 for cursor-proximity means for (a) comparing the current rendering position of the audio cursor with the rendering positions of the item-representing sound sources are disclosed by a cursor proximity means of columns 7, lines 19-33 Cragun. Cragun cannot meet this requirement because Cragun does not include an audio cursor. No sound is associated with the Cragun cursor. Column 7, lines 19-33 is concerned with the output of each of signal sources 72-75, Figure 4, that enable an audio signal to be associated with each object displayed within workplace 24, Figure 3; see column 7, lines 15-17. Column 6, lines 19-37 indicates exemplary objects are drives 26 and 27, printer 28 and window 30 of Figure 3. None of these objects can be considered as a cursor. The Cragun cursor is described in column 6, lines 49-54 as pointer 37 that is a movable, visible mark for indicating the position in which an operation may occur within workplace 24. Because Cragun has no disclosure of pointer 37 generating an audible sound Cragun does not meet the requirement of claim 21 for a cursor-proximity means.

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Portion G of the Response to Argument sets forth a new ground of rejection with regard to claims 13, 29 and 45. The final rejection stated the features of these claims were found exclusively in Cragun. The Examiner's Answer incorrectly relies on a combination of Slezak and Cragun for the features of claims 13, 29 and 45.

Claims 13, 29 and 45 require the audible indication that is generated and modified when a cursor comes close to an item-representing sound source to be a first, non-varying element and a second, continuously variable element. The non-varying element is indicative of the general proximity on the cursor to the item-representing sound source. The continuously variable element indicates the separation distance between the cursor and the item-representing sound source. In the rejection of these claims the examiner states: "One of ordinary skill can appreciate that a non-varying sound, which comprises a sound direction in a three dimensional field, combined with Slezak's teaching of a cursor sound source, which also has an associated sound direction in a three dimensional space, reads on element indicative of the general proximity of the cursor to a (sic) item-representing sound source." This position of the examiner is incomprehensible and does not satisfy the requirements to prove obviousness.

Portion G of the Response to Argument presents an incorrect argument with regard to claims 17 and 33 by stating that Figure 10 of Slezak includes sound source 294. As discussed supra, reference numeral 294 of Slezak is apparently an indicator of a sound source in the form of an optical source, rather than the sound source per se. In

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Figure 10, the simulated sound source is a selected sound from a list of system events 282; see column 10, lines 1-3.

The comment in the Examiner's Answer regarding claims 17 and 33 about the immateriality of Cragun's cursor not emitting sound "when Slezak teaches a sound source indicating the position of the cursor" demonstrates the patentability of appellant's claims 17 and 33 over the combination of Slezak and Cragun. This statement by the examiner indicates there is no reason for one of ordinary skill in the art to have combined Slezak and Cragun to meet the terms of claims 17 and 33.

Portion H of the Response to Argument states it would have been obvious to one of ordinary skill in the art to have modified the examiner's combination of Slezak and Cragun as result of column 13, lines 50-52 and 61-64 of Balabanovic to provide the requirement of claim 27 for a cursor-proximity means including a second component provided through modifying the sounds emanating from a cursor sound source. Column 13, lines 50-52 of Balabanovic is concerned with playback of audio narration made by an author walking through a three-dimensional path. Column 13, lines 61-64 relates to another embodiment wherein segmented audio recorded by the author is played as the user approaches a related three-dimensional figure. The Answer provides no indication as to how one of ordinary skill in the art would have modified the examiner's combination of Slezak and Cragun as result of Balabanovic.

The Examiner's Answer also provides no motivation for modifying the examiner's proposed combination of Slezak and Cragun as result of Balabanovic. As such, the

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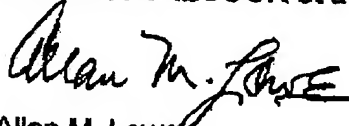
rejection of claim 27 is contrary to the In re Vaack decision cited on page 17 of appellant's main Brief. As a result, the examiner has not attempted to establish a prima facie case of obviousness with respect to claim 27.

Portions I, J and K of the Response to Argument do not overcome the arguments advanced in sections I, J and K of the Argument portion of appellant's main Brief.

As result of the arguments presented in this Reply Brief and those set forth in appellant's main Brief, reversal of the various rejections is in order.

Respectfully submitted,

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